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ABSTRACT

In this guide, the results and findings of a major survey of magnet schools are organized into a practical manual for school districts to use in planning, developing, and implementing new magnet programs or improving those already in existence. The guide is divided into three sections: (1) key steps in magnet program development (an outline of developmental steps, including a description of the options for districts and magnet schools at major decision-making points); (2) management challenges for effective magnet school programs (a description of the major challenges in magnet program development and suggested ways to meet them); and (3) summaries of magnet school program designs (a brief explanation of the curricula and characteristics of six of the magnet schools found by the survey to be most successful in desegregating and in providing quality education). (CMG)

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GUIDE TO MAGNET SCHOOL DEVELOPMENT

Based on
SURVEY OF MAGNET SCHOOLS
ANALYZING A MODEL FOR QUALITY INTEGRATED EDUCATION

A National Study for the
U.S. Department of Education
Office of Planning, Budget and Evaluation

Prepared by
JAMES H. LOWRY & ASSOCIATES
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UD023322

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GUIDE TO
MAGNET SCHOOL DEVELOPMENT

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September 1983

Based on
SURVEY OF MAGNET SCHOOLS
ANALYZING A MODEL FOR QUALITY INTEGRATED EDUCATION

Final Report of a National Study for
U.S. Department of Education
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PREFACE

James H. Lowry & Associates is pleased to present the final report for a Survey of Magnet Schools: Analyzing a Model for Quality Integrated Education, to the U.S. Department of Education, Office of Planning, Budget and Evaluation.

The report responds to the Department's request for a comprehensive, national survey of the effectiveness of magnet schools in improving public education quality and assisting school desegregation. This request stems from the need of national, state and local legislators, educators and parents, to know the effect--and potential for effect--of magnet schools on improving public education. Specifically, they are interested in issues such as:

- Do students in magnet schools learn more than students in other schools?
- Do magnet schools provide equal learning opportunities for all students?
- How does the curriculum, faculty selection, quality of instruction, and related academic issues compare with other schools or educational programs?
- What factors in a school district contribute to the success of magnet schools?

To address these and other issues, the survey of magnet schools was designed for the following purposes:

- To evaluate the magnet school for its contribution to the improvement of urban education and to voluntarily desegregating, and to the effects on students.

- To assess how urban school districts can develop and operate successful magnet school programs without conflicting with the purposes of local school districts and community groups.
- To identify what issues, plans, leaders, resources, and support are necessary in the development of an effective magnet school program.
- To develop the process for adopting an effective magnet school program to a local school district's objectives, needs and interests and show how this process can be a means of curriculum innovation.

This design enables our national survey to serve both as a tool for evaluating the magnet schools' success in improving the quality of public education and for studying how the magnet schools' definition, development and implementation contributes to its success or failure.

For purposes of this survey, we have defined a magnet school as follows:

1. A distinctive school curriculum based on a special theme or method of instruction,
2. A unique district role and purpose for voluntary desegregation,
3. Voluntary choice of the school by the student and the parent,
4. Open access to school enrollment beyond the regular attendance zone.

This definition was applied throughout all survey steps and tasks. It should be referred to throughout the discussion of the research issues, study design, analysis and findings.

Our survey findings are presented in a manner that will aid the Department in its efforts to guide national education policy and practice. Survey findings also are presented to aid state and local education administrators, parents and teachers in making decisions for educational improvements. Accordingly, the findings are organized and presented as follows:

Chapter I provides background information on the concept and evolution of magnet schools; it discusses the purposes of the national survey including detailed information on several issues identified by the National Commission on Excellence in Education; and it explains the scope and objectives of the survey and final report.

Chapter II explains the research design, research issues and comparative case methodology and describes the sampling plan and the selected sample of urban school districts.

Chapters III, IV, V and VI report study findings on the major research questions. Chapter III explains our study findings on education quality. Chapter IV describes how magnet schools affect desegregation. Chapter V addresses the analysis of magnet school costs. Chapter VI analyzes the role of magnet schools in urban education and in meeting urban education problems, particularly the relationship of district leadership and community involvement to the effectiveness of a district magnet program.

Chapter VII summarizes all of the findings and outlines the Policy Options for a magnet schools program. A Guide to Magnet School Development separately accompanies this report. The Guide gives an outline of the key steps in magnet program development, describes major management challenges, and summarizes six effective magnet schools.

GUIDE TO MAGNET SCHOOL DEVELOPMENT

INTRODUCTION

The study results of our analysis of magnet schools' effectiveness in improving the quality of education and offering voluntary desegregation, as well as our analysis of the factors related to effective magnets, provide a wealth of information regarding ways to improve magnet programs. The findings of the final report are the most extensive analyses to date on what effects magnet schools have had on public education in urban school districts. Additionally, the findings help to identify the key factors that differentiate successful magnet programs from those programs that have not made an impact on public education or produced distinct, innovative, and educational methods that will last.

Magnet schools come into being for a great variety of reasons. Like other organizational innovations, they can be designed to serve one or many educational and local political purposes, and this is a part of their appeal. In most communities, magnets have earned a reputation that can be summarized by the phrase "quality integrated education." The knowledge gained by this study can thus be put to direct use by superintendents, principals, and other senior school systems officers in making linear progress toward this goal.

In this guide, we organize the study results and findings into a practical manual for school districts to use in planning, developing, and implementing new magnet programs or improving the programs that are in existence. The guide is divided into three sections:

1. Key Steps in Magnet Program Development: an outline of developmental steps which includes a description of the main options for districts and magnet schools at major decision points.
2. Management Challenges for effective magnet school programs: a description of the major challenges in magnet program development and suggested ways to meet the challenges based on the study results.
3. Summaries of Magnet School Program Designs: a brief explanation of curricula and characteristics of six of the magnet schools that the survey found to have the most educational and integrative effectiveness.

These three sections translate the information collected from our 15 sample districts, and our analyses of the data related to the research questions, into summaries that interrelate the information to make it most useful to urban school districts in determining how they can best utilize and develop magnet schools. The guide is not intended or designed as a "recipe for success" in every school district or with every type of magnet program. We recognize that magnet school programs vary by the objectives, needs and interests of each school district, and thus, a program should incorporate the distinctive district characteristics and requirements. But, this information should assist district administrators, board members, planners, and parents in developing a rational,

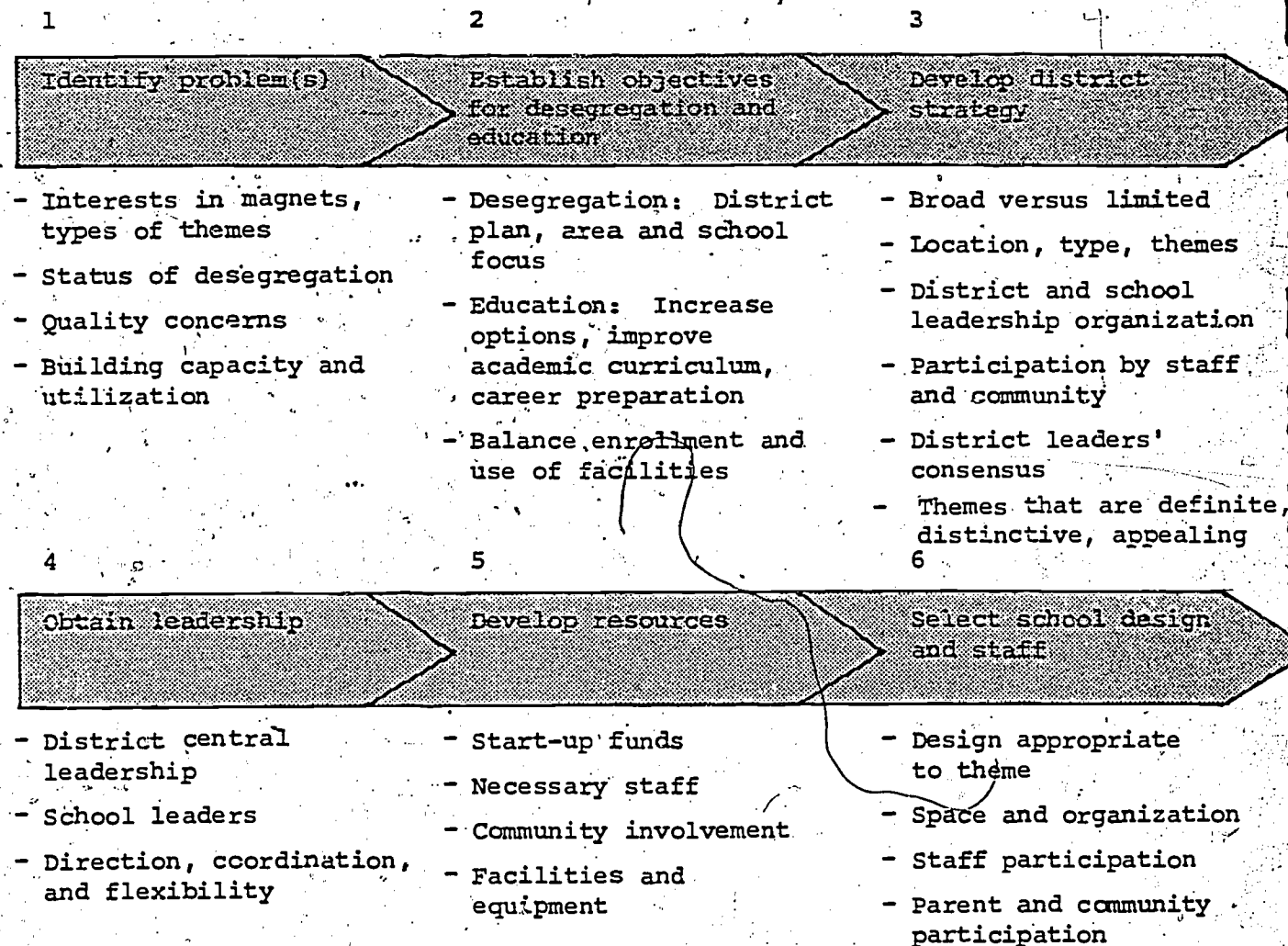
planned approach to magnet schools, and one that will include the key steps to increase the probability of the program's success.

KEY STEPS IN MAGNET PROGRAM DEVELOPMENT

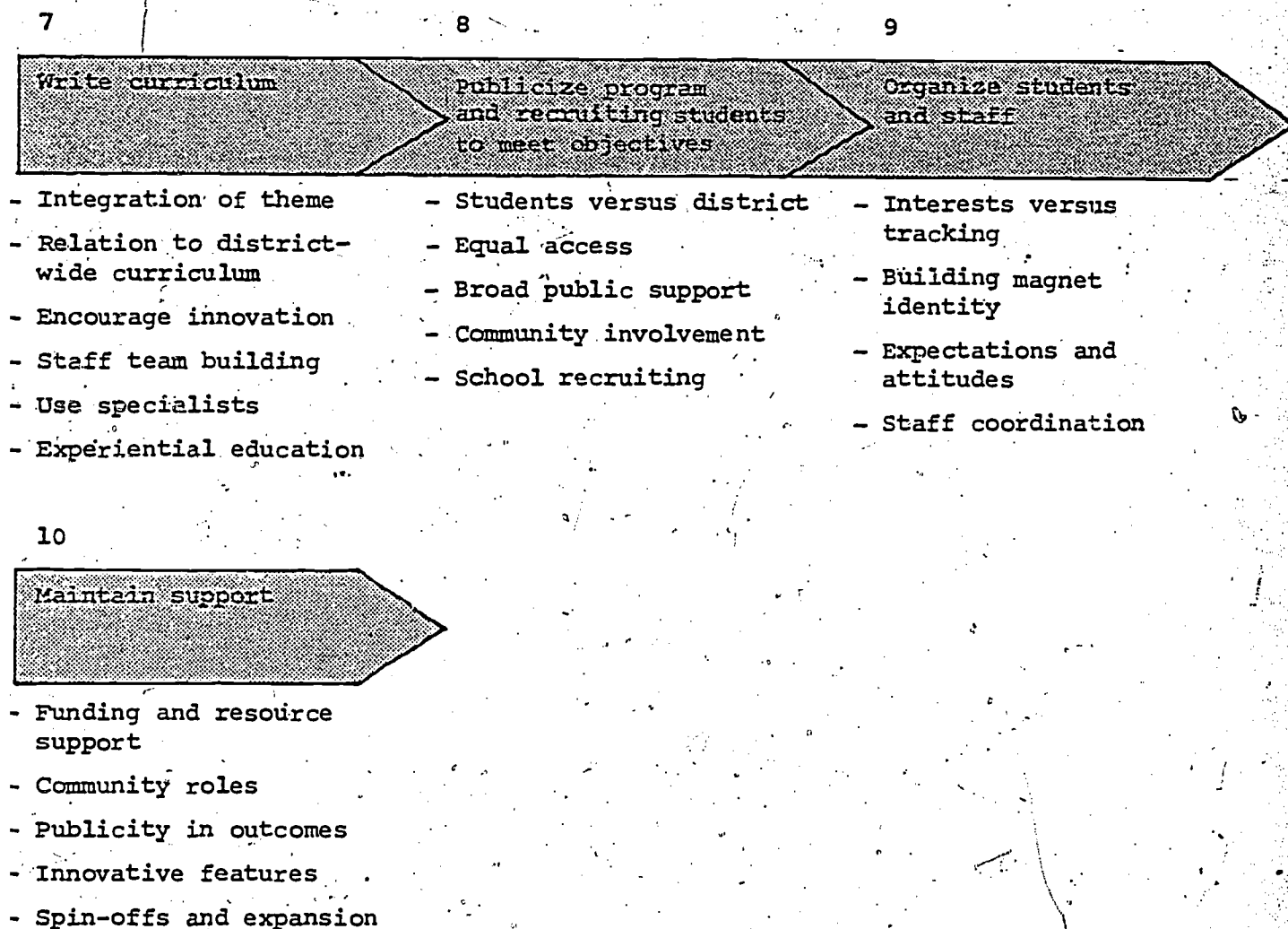
Using the program development model described in Chapter VI of the final report, we have outlined 10 important steps that school districts should include when planning, developing, and implementing a magnet school program. Figure 1 provides a graphic display, in a sequential manner, of the relationship of these steps and lists the major options that should be considered in the decision.

Our outline and summary of the steps in magnet program development do not state which individuals or groups must make key decisions or direct particular development steps because they may vary by district. However, we do include specification of persons and groups in the district and community that should be involved in the various steps of the process. It should also be noted that our outline of magnet school program development does not recommend any particular size program, i.e., number of schools or students, or types of themes and organization. These are among the options that must be evaluated by each district and from which choices must be made based upon a strategy that is consistent with local program objectives and general district educational goals.

KEY STEPS IN MAGNET PROGRAM DEVELOPMENT



KEY STEPS IN MAGNET PROGRAM DEVELOPMENT
Continued



In planning the process of magnet program development, school district decision makers should keep in mind the ideal design for magnets as indicated by our study findings. The elements are:

- a) District-wide access for students on the basis on voluntary preference
- b) A curricular theme that is definite, appealing, and distinctive
- c) A principal and a staff capable of accomplishing the theme as it has been presented to the public
- d) Instruction that is regularly reviewed by the school district for its rigor and fairness, i.e., accountability
- e) A facility and site selected on the basis of racial, ethnic, and socioeconomic neutrality
- f) Good transportation and school security services
- g) Student and staff composition that closely reflects the racial and ethnic composition of the community
- h) A method of checks and balances that will prevent segregation or educational deprivation in non-magnet schools
- i) Startup funds for facilitating early success in implementation.

A magnet school program is not a demonstration project nor a program experiment. These purposes may be positive side effects, but a magnet program is first, and above all, a teaching and learning design whose attractiveness resides in its credibility as an effective, racially equitable, and safe locus for children and youths.

1 - Identify Problem(s) Leading to Magnet Schools

The first key step in a district's planning effort for a magnet school program is to identify what local problems require solutions offered by a magnet school program. The identification of "the problem" means that district leadership acknowledges that local needs or issues related to the schools have reached a point where some action is required. The magnet concept becomes recognized as a means of solving certain problems with which districts are faced.

Our study results indicate that the common problems that lead to magnet schools are:

- Need for increased desegregation or alternative methods of desegregation
- Perception by staff, parents or community leaders that the quality of education in the district has declined or not kept pace with student needs
- Interest in choice and options in public education, including career or vocational education
- Declining or shifting student enrollment.

Board members, superintendents, and community leaders should join in advocating, locating, and reviewing planning options for new magnets. The potentialities of magnets are very great, but they need careful cultivation in order to be realized. Good magnets require hard and sustained development and implementation effort.

An important consideration for the district in planning, is how the problems that lead to magnet programming are identified. The districts that have gone to some length to broadly survey community perceptions of needs and interests in magnet-type programs found that this information was very useful in succeeding planning steps. The needs assessment process was useful primarily in building support for the magnet concept, and in locating the neighborhoods and schools which would be appropriate and desirable for a magnet school. However, if the community is asked to contribute to a needs assessment, subsequent planning should reflect the results of this assessment or the program will run the risk of eventually losing support.

The districts in our study that did not seek a broad community contribution to the identification of needs, at the start of the planning process, generally developed programs that only narrowly responded to specific community interests and the program had less chance of solving basic district problems. In this circumstance, the magnet program was more likely to become just another "special program," and one that did not reach a high priority status in the school district.

Magnet programs are easier to design and implement in very large, multiethnic urban school systems, yet smaller biracial, less urban systems can make effective use of them through the application of extra effort. There are no inherent obstacle to the adoption of a magnet program strategy in smaller systems, there are merely fewer options within the district.

2 - Establish District Desegregation and Education Objectives

An important early step for district leadership, including the school board, superintendent, and top administrators, is to establish firmly what the district's objectives are for the program and then to develop a leadership policy consensus around these objectives. First, it is important that the objectives match the basic problem.

For example, the problem may be that parents and students do not find enough opportunity for specific career-based programs. If the school district develops magnet schools designed to offer only advanced curricula in core subjects, the program will have difficulty gaining strong support and will probably lead to conflicts concerning its future existence. Likewise, if a district has 20 schools that do not comply with federal and state desegregation requirements, the development of one or two magnet schools will conceivably only exacerbate the problem.

Leadership consensus on objectives significantly eases the process of program strategy decisions and gives working direction to the staffs that will be involved. Magnets can succeed educationally in the absence of a deep policy consensus about their deliverability, but each departure from the consensus will jeopardize the magnet program's observable outcomes of quality, integration, or cost-effectiveness.

Our study findings show that there is substantial meaning in the term "quality integrated education," and that local public education leaders and educators know how to design and attain the ideal when and where they want to do so. Poorly integrated magnets tend to be direct results of indifference toward, or deliberate policy choices of departures from this ideal, sometimes because racial inequities are still cherished by white decision-makers and sometimes because competing ideals outweigh the goal of integration.

Our study has illuminated the relation between desegregation, integration, and quality education.

Desegregation is a precondition of integration, but the two are by no means the same thing. While desegregation does not

"predict" quality within magnets, a racial balance does predict academic gains. Integration and quality are highly associated; each is a correlative facet of effectiveness.

The study results have informed the two-sided issue of desirability and feasibility of magnets in several respects.

First, a district whose leadership gives priority to the implementation of quality integrated education can make effective use of magnets as a powerfully facilitating tool.

Second, magnet development will not produce either instructional quality or racial/ethnic integration in some mechanical way. These aims must be built into the decision, planning, and implementation process, but when they are and when the endeavor is earnest and adapted to local practicalities, the results are positive and predictable.

Third, the decision to create and maintain magnets for these purposes, to yield these results, must be reached in tandem with decisions about their planned relation to regular or non-magnet schooling in the district. Otherwise, magnet development can impede the growth of improved teaching and learning opportunities.

And finally, racial/ethnic integration fosters effectiveness. It cannot be left to chance or to the vagaries of a policy of neutrality. It must be designed into magnets if their potentiality as learning environments is to be made optimal.

3 - Develop District Strategy for Meeting Desegregation and Education Objectives

A third step in the development process is also completed at the district level i.e., the determination of the basic strategy for the program. In this step, we include decisions concerning the number of magnet schools, the type (total school, part-school), theme selection and location of the magnets. In many districts, these program characteristics might be treated as separate planning decisions, or the schools, themes, and locations may evolve simply due to the school-connected interests or other district requirements, such as a court-ordered desegregation plan. However, it is useful to view the strategic decisions that set the scope, direction, and size of the program as a product of district strategy, with varying degrees of formalization.

Desegregation Strategy

A basic strategy decision is the breadth of the program relative to the number of schools in the district. A broad strategy is normally associated with a districtwide voluntary desegregation plan. A limited strategy focuses on certain schools or areas of the city where educational improvements or the desegregation progress is needed. A broad strategy is

generally associated with distribution of magnet schools across a large portion of the district, and typically districts try to balance location of magnets in minority, white, and heterogeneous neighborhoods as a means of achieving equity in distribution of programs. In some cases, magnets become part of a one-way desegregation plan and are located in a minority or white neighborhood, but this strategy tends to lead to negative reactions from white and/or minority citizens or both.

Many districts have experienced the issue of magnet neighborhood parents wanting access to the local magnet when the enrollment is open to the whole district. This problem arises when the interest in magnets is underestimated or the magnets are viewed as an advantage that is being withheld. If parents in the magnet neighborhood do not see other magnets as acceptable alternatives and do not have access to the local magnet, resentment is likely to be created. Several solutions have been used by districts:

- Expand the size of the magnet school so that it can offer neighborhood residents first choice, and still have room to attract students from other areas of the city.
- Establish a districtwide open transfer policy allowing transfers that improve the racial balance of sending and receiving schools. This extends voluntary choice opportunities to other than magnet schools.
- Locate magnets in underenrolled schools where more students are needed or there is the threat of the school closing. Some districts have placed magnets in a neutral location where schools have not existed previously or which is not claimed by a particular neighborhood or community.

Education Strategy

Closely associated with strategy decisions regarding magnet location is the decision concerning the theme the school will adopt. The district and school often must upgrade the public identity of the school, e.g., "rough school," "academically poor" or "a jock school."

The theme can be part of the effort to change the school identity and attract a racially heterogeneous student enrollment. An upgraded academic curriculum, educational options, or career themes can help to change the image of the school. Decisions related to a part-school magnet program or a total-school magnet are often based on the size of the facility and the strength of support for the present school. It has been found very difficult to close an existing comprehensive high school and change it to a magnet school. A part-school magnet can be added as a means of curriculum innovation and improving the school identity. A major advantage of total-school magnets is that the district can close the school, remodel and upgrade the facilities, and even change the name as a means of improving the identify. This pattern generally is used with under-enrolled or segregated middle and elementary schools.

Some degree of selectivity is an inherent feature of all magnets. If nothing else, magnet students self-select to attend a magnet based on the way it is marketed. Beyond this universal minimum, however, the extent to which students are selectively screened for admission to magnets can vary greatly.

In some cases, a highly selective magnet will be appropriate for the local context, and in some instances, a nonselective magnet will be most suitable. In other situations, some intermediate degree of selectivity will be the best choice. In fact, a district may choose to implement magnets that have varying degrees of selectivity depending on local conditions, resources, and community desires. Several of our sampled districts elected this option.

Local planners should be aware, however, that student selectivity is a policy choice. It should be faced openly and publicly in the earliest planning stages, and the policy debate should be inclusive of all groups. The district that fails to do this may subsequently discover that its magnets are perceived by many sectors of the community as elitist and inequitable, even when they are non-selective and widely inclusive, for many parents and educators alike regard magnets as characteristically more selective and exclusionary than our survey found them to be. Misperceptions arising out of insufficiently realized or subrosa policy debates on the issue

tend to induce resentment and conflict from community groups who feel shut out and regular school personnel who feel pushed aside and unjustly compared to what they perceive as exclusive and favored magnets. Over time, this can undermine the support accorded magnets, and undercut their identity and definiteness, which are associated with educational quality.

Finally, local districts should try hard to tie policy choices about student selectivity to programmatic considerations. For instance, high selectivity may be necessary for accelerated placement magnets, while a specific theme magnet, e.g., arts or environment, can serve students at all levels of preparation. The degree of selectivity should be closely tied to the curriculum and the educational process of the magnet.

The degree of participation in decision-making by the school community and staff is another important element in program strategy. A basic decision by district leadership to seek the involvement of parents and community leaders in areas where magnets are being considered is of critical importance. Careful explanation of the objectives of the program, and effective requests from district leaders for community help in theme selection and program planning can go a long way toward heading off opposition to change and the apprehension of the neighborhood that it is "losing its school to outsiders."

However, the firm resolve of district leadership to accomplish

the program and to convince the community that the magnet school program is meeting the district's problems also can prevent opposition from growing.

Strategy Development Process

Another important element of the strategy development process is the involvement of district and school staffs in the actual process of planning strategy. For example, some districts have asked principals and teachers to develop ideas and designs for magnet schools. Others have included them in all strategy decisions related to the district program and individual school decisions. The goal in participatory measures is to prevent the magnet program from being viewed by those expected to operate it as something that is "imposed by the people downtown". The involvement of district administrators and curriculum staffs in magnet strategy development gives the program the benefit of their expertise and prevents bypassing the regular chain of command in decision-making. For long-term success, the magnet schools need to be viewed by district and school-level staff as a part of the "regular system" of instruction in the district.

Finally, the top district leadership should have a high degree of policy consensus on the appropriateness of the strategy given the agreed upon problems and objectives.

Dissension among the board and top administrators, concerning the wisdom and value of the program, usually results in conflicts within the community during implementation, eventual problems in operation, and a lack of continuing support for the magnet schools.

4 - Obtain Leadership for the Program and Schools

The fourth step of development is for the district to identify strong, innovative, and resourceful leaders for the program and the individual schools.

In a large district, the central direction and coordination of the early stages of magnet planning requires a strong leader. The many decisions related to strategy and development of support for the strategy require commitment of staff time and effort to keep the process operating. For the district to move from an overall strategy to actual development of programs in each school, an important coordinating and managing function must be performed. The central leadership must master and communicate the details of how the program will work, be able to coordinate programs in individual schools, and have authority to make critical decisions. The central staff also must have the flexibility to delegate authority to the principals and school staff so that they can exercise organizational and program creativity.

Magnets can flourish as schools or as programs within regular schools, but in either case they need strong initial management exercised at both the district and the school level. A superintendent who appoints persons as magnet directors and principals without thoroughly examining their dedication, previous experience and training will subsequently have less effective educational and intergrative outcomes from the program design than it has the potential to produce.

The school level leadership for the magnet school program may be even more important because the principal or magnet director must translate the program concept and design into actual working tools enabling the teachers to do their job and better relate to their colleagues and students. The school leader is typically the person who generates interest and support for the magnet school in the community and stimulates teachers to participate in developing an innovative approach to their work. Often, the leadership must be "entrepreneurial" in obtaining program resources, staff and students, and ensuring the magnet's survival over time.

Strong leadership is essential for implementing a quality magnet. Where the total-school model is being used, magnet principals should be chosen for their leadership skills and entrepreneurial abilities. Then they should be given sufficient authority, freedom, and support to enable them to put the magnet school together and develop community support.

The same is true for magnet programs within schools, except that in this case the principal may wish to delegate part of the leadership role to a magnet-program coordinator.

The important point, for the magnets' district and school leadership, is that there must be a district policy that allows adequate creativity and experimentation in the program. This is necessary in order to be able to attract the type of dynamic, ambitious, and imaginative administrators and teachers that the magnet program requires.

5 - Develop Resources

A basic element in the implementation of magnet schools is the development of ways to better utilize existing resources in a district and community. In essence, the magnet concept is a method by which a district can reorganize and maximize staff, facilities, skills, community participation, and community resources, as well as a new means of allocating students to schools. Some school districts in our survey obtained additional funds for new staff, equipment, and supplies, but, for most districts, the key to the magnet program was the better use of existing resources.

Schools planners should also remember that magnets can be quite modest and still achieve high educational quality. Most districts do not have the resources to implement "super

magnets," that can cost millions of dollars. The critical point for educational quality is the magnet's authenticity, identity and coherence, not the fact that it offers "state-of-the-art" programs as its theme.

One factor our study found consistent, across all the districts surveyed, was the need for a small start-up funding grant or allocation. Additionally, there is a need for special assignment of administrators or teachers to provide the initial planning, publicity, and development of interest and support, which is vital to the successful implementation of the magnet school programs. In some districts, start-up funds were necessary for special equipment or supplies related to the program themes, but these were viewed largely as a one-time cost. Some start-up funds are also important symbolically to demonstrate to the district and community that there is a serious intent for and commitment to the program.

One of the important functions provided by start-up funding and staffing is the development of a plan for obtaining other resources that are necessary. District strategy for recruiting and selecting staff must be planned. A program for gaining effective involvement of businesses, community organizations, parent groups, and universities requires time and money. Also, a determination must be made about the adequacy of designated facilities, what remodeling may be necessary and special equipment needed. In order to develop an

effective, novel program that is not an extra cost burden on the district, a careful plan for exploiting existing resources must be developed.

6 - School Design/Selection of Staff

Steps 5, 6, and 7 of this outline often overlap to a great degree. Resource development, school program design, staff selection, and curriculum development are interactive tasks. But, we combine the basic design of each school's magnet with staff selection because they have important interrelated purposes.

Generally, the theme of the magnet is decided as part of the overall district strategy at the same time a school is selected, but even then it can be the product of strong interests of a principal or teachers. However, once the basic outline of the magnet program is set, the important next steps are completing the design, which consists of:

- Types and level of courses
- Teaching methods
- Approaches to integration of theme
- Means of recruitment and selection of students
- Assignment of teachers
- Identifying community resources.

Many of these tasks should involve the magnet staff who will be teaching in the program. Thus, the selection of staff should be an early step in the design process.

School planners should design curriculum, space utilization, staffing, and instructional activities in keeping with the theme and magnet goals. Local resource limitations must be taken into account. As examples, a creditable arts program cannot be undertaken if there is no available space for a studio; a viable science program cannot be instituted without opportunities for laboratory activities. Merely adopting the "magnet" label will not work, and the school or program that tries to do so without backing it up with authentic magnet programs, however modest they may be, will soon find itself without credibility or students.

In designing the theme and program, planners need to work explicitly on connecting these items with the aim of racial/ethnic integration. The curriculum should be multiethnic in interest-value and multicultural in content. Intergroup respect and social learning from cross-group interaction is necessary in order to achieve the maximum benefits from the magnet experience. Fairness and methods for ensuring schoolwide participation in co-curricular life are equally important.

Our findings on the factors contributing to the high educational quality of magnet schools show the importance of principal leadership in the design of the magnet and selection of staff. These steps should be closely related. In some districts with very effective programs, central district curriculum staff were involved in school design and staff selection, but the programs also had strong leadership from principals and gave teachers the opportunity to contribute to shaping the program.

Magnet leaders should seek to select teachers and staff who can share the vision of what the magnet is intended to be and who are willing to invest heavily in working out the details of this vision in daily practice. Once this is accomplished, magnet leaders should work productively to cultivate this investment, and to encourage faculty cohesion around the theme.

Magnet staffs (and students) should reach out beyond the confines of their immediate professional responsibilities to the larger communities, both within and outside the school district. This will not only help to ensure "special treatment" and support, but it will also help to build magnet theme and program identity as the communities provide assistance.

Magnets offer opportunities to take advantage of the talent present in the community. This can be accomplished by part-time employment through exemptions of artists, scientists, business managers, and athletes from some certification requirements, and by volunteers. This talent can be blended with certified professionals and all can share in program planning and decision-making.

7 - Write and Develop Curriculum

The stage of curriculum writing and developing has three important functions for the magnet school:

- To organize existing outlines, materials and resources of the school, district, and individual staff members around a program theme and central direction
- To build school staff teamwork and develop the magnet school identity
- To encourage innovation in teaching methods and use of resources, including seeking specialists from the community in curriculum and instructional development.

The development of the magnet school curriculum is a crucial step in joining the district intent and direction of the magnet with principal leadership and teacher participation. This is the intersection where all factors in making the program an ongoing reality and success join to turn plans, designs, and intent into a new and dynamic educational experience.

Another important part of the curriculum development process is building a design that will meet the interests and needs of the target students and continue to attract students to the magnet program. For example, if a high school health/science magnet is intended to serve a broad range of student interests and ability-levels, the curriculum must include advanced mathematics and sciences courses as well as pre-vocational health and science education instruction and exposure to career options in health occupations. Magnet school recruitment is often by word-of-mouth among parents and students. Therefore, the program must, from the first day of operation, have a well-designed curriculum, a strong program identity, and clearly-defined features that make it unique. The voluntary choice of a school means that students may also decide not to choose a program in succeeding years if it fails to meet their expectations.

Magnet planners should remember that quality education in magnets does not appear to be a function of the mechanics of theme, size, program type, racial/ethnic composition, or geographic location. In short, there is no magic theme or formula that automatically guarantees educational quality. High quality magnets require careful planning and hard, sustained work by capable and dedicated staffs and with leadership to match their daily experiences with the stated themes and goals. They also require significant and sustained

support and attention from district leaders, whether this takes the form of money or political support. School planners unwilling or unable to secure and maintain these commitments should not undertake the implementation of magnets.

The descriptions of six educationally and integratively effective magnet schools, at the end of this guide, provide a useful outline for the kinds of curricula that have been successful and how they were developed.

8 - Publicity and Recruiting to Meet Desegregation and Education Objectives

The recruitment of students for magnet schools is typically an activity that is most critical when a new magnet program is being initiated in a school district. This is a function that is often centered on the role of principals, counselors, teachers, and students, but some districts have combined student recruitment with a districtwide campaign to gain publicity for its magnet program. A central district magnet school coordinator often leads the initial development of publicity concerning the plans, objectives, and ideas for magnet schools. Some districts also hire or assign staff members to lead and coordinate the recruitment of students.

Our study found the level of activity for both public relations and student recruiting was much higher at magnet schools than anticipated from previous research literature. This may be because the concept of "selling" or "marketing" a program is uncommon in public education. However, we found that districts, which had assigned a high priority to using magnet schools for voluntary desegregation and offering voluntary choice in education, engaged in considerable publicity activity. They approached the public as "consumers" of public educational services. Methods of publicity and recruiting include:

Surveys of parent and student interests

- Districtwide orientation meetings, seminars and discussions on the program plans and objectives
- School and neighborhood orientation meetings
- Newspaper, radio, and television public service advertisements
- Involvement of community and neighborhood organizations in spreading the word, e.g., service organizations, community education and human services groups, arts and cultural groups, churches, parent-teacher associations, parent groups
- Local businesses and business organizations, e.g., the Chamber of Commerce, that will give positive recognition and support
- Each magnet parent brings one other parent to a tour and orientation session
- Principals of magnet schools visit other schools, communities and parent groups
- Magnet counselors and teachers make presentations at other schools

- Student presentations, performances, discussion sessions
- Open house at a magnet school
- Mailing brochures and flyers to parents, and placing these in schools and offices
- Posters and hand-outs to students
- A combination of school tours, class presentations, and parent interviews with principal, teachers, and students while school is in session
- Students and parents informally spreading the word about their satisfaction with the school.

The primary purpose for a publicity and recruiting campaign is to attract students to the schools. When magnets are in the process of changing a negative school identity and competing with the neighborhood schools, districts have found these activities necessary. A benefit that is realized from publicizing magnet schools is that the effort to win support for the program, and the individual schools, tends to sell the public on the magnets value in improving education in the district in general. That is, the attention purposefully created for magnet schools may give the public an overall improved perception of the district school. Thus, the magnets have the ability to increase the interest in and support for the public schools as a whole.

9 - Organizing Students and Staff

As we have explained in our analysis of magnet schools' effects on public education, the concept is a means of improving and invigorating both the school curriculum and the organization of staff and resources. The magnet school can be organized to motivate teachers, students, and parents to make it a method of providing distinguished education. This is accomplished primarily by building a positive self-identity among students and the staff, based upon the magnet school theme and objectives.

Magnets that are organized as a total-school obviously have an advantage in constructing a positive educational identity. Part-school magnets sometimes build their identity by assigning one part of the building as "the magnet school." The students take their classes together and have the same teachers and counselors. The principle method of building a part-school magnet identity is by establishing a core of students highly interested in the magnet theme, and building a strong relationship between this theme and the staff. One way to accomplish this is through the students who transfer from other schools for the program. They are generally the most interested in the theme, and this interest is the basis for building an identifiable magnet group distinguishable from the other students in the school.

Some of the magnet schools in our survey gained a reputation as means of tracking brighter students. This is particularly a problem with some part-school magnet programs where magnet students are in frequent contact with other students. To avoid this problem, some principals purposefully have integrated magnet students with non-magnet students for a part of the school day. Possibly a better solution would be to ensure that the magnet choice is not limited to only advanced academic courses. Another solution is to demonstrate to the staff, parents, and students that the magnet selection process is fair and equitable, and that magnet enrollment is not comprised of students mainly from one socio-economic, racial, or academic group. The principal should also demonstrate that school funds and resources are equally proportioned between magnet and non-magnet students.

A major effect of a magnet school on students is often that their expectations are raised and their attitudes and aspirations are improved. By being part of a program comprised of other students of similar interests and having teachers who are also there voluntarily, students come to place a higher value on their education. A major responsibility of the magnet school principal is to lead and coordinate the teachers and counselors in order to build and maintain the positive values associated with the magnet choice. Students can be assigned

relatively easily to the same group of courses and teachers, but the magnet school becomes a reality with the development of the common purpose for which they are enrolled.

10 - Maintaining Support

The final key step in development of a magnet school program is to ensure its continuation over time. The magnet school must become part of the "regular" system of instruction in the district and not be viewed as an experimental or temporary program or one that continues only with a special allocation of district, federal or other outside funds. Additionally, the magnet program and schools need to preserve the essential ingredients and features that make them unique. In the last twenty years, American public education has been filled with examples of educational innovations that were developed with temporary support and enthusiasm, but survived in name only, due to lack of relevance to the basic pattern of instruction. To avoid this pattern, the magnet school must gain full support as a means of educational diversity and opportunity within the boundaries of the normal operation of the district schools.

There are several methods by which districts in our survey have achieved long-term acceptance for magnet schools:

- It is important to receive a commitment from the school board, superintendent, and top administrators to magnet schools as part of the regular budgetary and administrative structure. Programs that remain part of the "federal programs office" or "special programs" budget item are likely, at some point, to be viewed as peripheral to the central district objectives.
- It is very useful to develop publicity on the outcomes of the school's performance after its initial period of operation. Positive public relations for magnet effects should match the publicity attached to goals and expectations during planning and development.
- In districts that have successful programs, magnet schools are seen as models for improving educational quality in other district schools. The magnet school should not be viewed as a panacea for all the problems of district schools, and they certainly are not appropriate for all schools, but they also should not be considered a limited program to serve a small, elite group of students (e.g., gifted and talented programs). Expressed interest on the part of magnet school principals and teachers in expanding their success to other schools and students signals to district leadership and the community that the magnet school concept has central importance for education in the district.
- A fourth frequently successful means of maintaining support for magnet schools is continuing the active involvement of the community through advisory committees, special instructors, support functions, and shared community resources. The community involvement in magnet schools is critical to keeping the program as a high priority item on the district agenda. It also helps the curriculum and teaching methods to remain unique and different in the view of students, parents, and district leadership.

These ten steps in the development of a magnet school program focus upon only the major categories of decisions and actions. However, these ten areas have been important in the successful programs we studied. They can be viewed as basic

conditions for the development of a program that can be successful.

MANAGEMENT CHALLENGES FOR EFFECTIVE MAGNET SCHOOL PROGRAMS

In reviewing our analysis and findings on magnet schools' effectiveness in improving education and desegregation, and meeting the problems of urban districts, we have noted several areas in which districts with successful programs have met and resolved major challenges in program management. Magnet schools require:

- Active commitment and participation by top district leadership in several areas of program decision-making
- Continuing participation in direction and management by central administrators
- Effective daily leadership by magnet school principals.

Policy-makers and "managers" also have been active in developing the strategy and direction of the program, have helped shape the perception of the program by the public, and have obtained staff and community support to deal with small problems, preventing the development of major problems. Less effective programs, unable to resolve major challenges as successfully, sometimes find that problems turn their magnet programs into a liability rather than a benefit.

In this section, we outline several major management challenges in magnet schools planning, program strategy, and

development, and we recommend methods of resolving each of the challenges.

CHALLENGE 1

PROGRAM STRATEGY AND PUBLICITY: To develop interest and support for magnet schools in the district and community without raising expectations that cannot be met.

This challenge concerns the way the magnet program is portrayed to the potential users of magnet schools and to the community as a whole. Magnet schools generally gained a high degree of publicity, whether wanted or not, due to their relationship to desegregation and plans for improvements in educational quality. The issue for district leadership and program planners is to present the program concept and plans in a way which will develop interests and support consistent with the design of the program and its objectives. This should lead to expectations and hopes that are reasonably obtainable. Some negative characteristics of this issue that we found in various sample districts were:

- Magnet schools are believed to be a solution to total desegregation in the district when the district has planned only a limited magnet program.
- The idea develops that the magnet school concept will improve the quality of education for all students in the district and that eventually all schools will be magnets (abandoning the neighborhood school).

- The district initially publicizes the magnet school concept as offering voluntary choice for interested students and parents, but the actual program is targeted for specific groups and has selective admissions procedures, e.g., testing, auditions, or a minimum grade average.
- Parents and students perceive the magnet school as an expansion of gifted and talented programs to more students.

These types of misconceptions and potential problems, related to conflict between developing program support and false expectations, can be and have been successfully resolved in some districts. Several methods have been used:

Potential Methods of Resolution

- A careful and thorough survey to assess the extent and types of interest in magnet schools, and a program design based on the broad interests of the community, not a few groups.
- Successful magnets take too much effort to warrant investing in them as short-run program. At a minimum, a ten-year lease on life should be planned.
- During planning, evaluate the degree of potential impact of magnets on the existing desegregation plan and publicize the real intentions of the program for desegregation.
- Select magnet themes that will appeal to the interests of parents and students across different racial, ethnic, and socio-economic groups. Organize magnet schools based on student interests and not on appeal to specific levels of students based on evidence of previous achievement or tests of ability (i.e., avoid magnets being viewed as tracking).
- Developing a plan for publicizing voluntary choice and a method of recruiting students that emphasizes open access. In some instances, specific recruiting efforts

will need to be planned for schools, city areas, and parent groups in order to spread the word.

- Involve community leaders and parents in planning for the magnet program, from the start, so that the program is well understood when implementation begins.

CHALLENGE 2

STAFF SELECTION: To identify and retain principals and teachers with leadership qualities, teaching skills related to the magnet theme, and a commitment to the concept, yet avoid having the program be viewed as "taking all the best teachers" in the district.

Our analysis, of magnets' effectiveness in improving educational quality, shows that staff skills and commitments are important factors in a program's success. However, from a district viewpoint, the magnet challenge is to obtain appropriate staff that can help the magnet be unique and successful, without the program developing the reputation of drawing good teachers away from the rest of the schools. The problem in some districts may be limited flexibility in hiring staff for a particular magnet program, due to seniority rules and staff cutbacks. Thus, the strategy for staffing must be to develop a cadre of teachers who will make the magnet concept a reality while avoiding the charge of robbing regular schools.

Potential Methods of Resolution

- In hiring new principals for the magnet schools, the administration can ask for volunteers from existing principals regardless of seniority, but avoid transfer

of a highly popular principal. Often, existing principals do not want to join a new school unless she/he perceive it as an exceptional opportunity and challenge. Also, experienced teachers who are qualified could be asked to volunteer as magnet principals.

- Position descriptions for principals and teachers in the magnet schools should specify qualifications related to the magnet concept and theme along with evaluations of seniority and teaching ratings.
- Assignment of staff to magnet schools should be voluntary whenever possible. Administrators and principals should avoid direct recruiting of teachers.
- In hiring staff members for a new magnet, avoid hiring more than a few teachers from any one existing school. If possible, do not reassign only the most senior teachers or teachers with the highest performance ratings.
- For a magnet program developed in an existing school, give all staff members an opportunity to apply and make use of those who are genuinely interested in the magnet concept and will make a commitment to the extra time, effort, and work that is often necessary.
- Emphasize to the prospective staff and to the public that magnet staff members are not paid premium salaries and that funds are not reallocated from another school to pay for magnets.
- Whenever possible, recruit part-time or volunteer instructors from local business, institutions of higher education, and professional or community organizations, to provide specialized teaching assistance.
- Look for staff members who are likely to benefit and do well as a result of assignment to the magnet; not just those who are already highly popular and effective teachers.

CHALLENGE 3

PROGRAM DESIGN AND RESOURCE ALLOCATION: To create magnet schools and programs that offer diversity and new opportunities within the district schools' curriculum, without creating the perception of opportunities being lost by existing schools and programs.

A major challenge for magnet school planners and administrators is to use magnets to increase the diversity of educational programs and opportunities in the district without giving students, parents, and staff of other schools a sense of loss for their schools. If this challenge is not resolved, magnet schools can be accused of causing a reallocation of existing resources in the district to benefit a few students at the expense of the rest.

Potential Methods of Resolution

- Any additional funds for magnet schools development and implementation, above regular prepaid allocations, should be obtained through new or additional revenues, e.g., federal or state grants, foundations, private corporate support, fund-raising, or new tax revenues.
- Emphasize the role of magnet schools as part of a range of program alternatives and educational choices for students at all levels of ability and achievement. Increase the acceptance of the concept by obtaining a range of choices, available to students, based on their interests and style of learning.
- Offer all neighborhoods, parent groups, and schools the opportunity to develop magnet schools or other special-theme or alternative programs if they are interested. Advance the role of community involvement in recommending and developing program diversity in the school (this removes the charge that central district administration or the board favors certain groups or areas and is dictating programs to schools).
- Encourage the linking of magnet schools' curricula, activities, and resources with other schools to increase interest in magnets, as well as provide benefits to students in other schools.

- Avoid placing magnet schools in existing schools that are already perceived as having advantages in terms of location, staff, program quality, or student mix.
- Plan the location of magnet programs and schools to assure distribution across the district, and clearly show accessibility and fair allocation of magnet opportunities for all students.

CHALLENGE 4

INNOVATIVE CURRICULA: To design and implement magnet curricula that are innovative and include unique instructional methods, activities, and courses integrated around the central theme, while operating within the "regular" district instructional system.

The task of designing and organizing a magnet school curriculum is sometimes made difficult by the dual goals of being innovative and having a unique theme, as well as fitting within the basic curricular structure of the district. That is, magnet schools do not strive to be alternative schools, i.e., necessarily different in substance and method from the comprehensive public school. Magnet schools are intended to have broad student appeal, not to serve as special programs for students who do not succeed in regular schools or are not desired there. A magnet school is an option for students in regular schools to choose, but should include the opportunity to go back to a regular school if desired. The magnet schools should not create a dual or tracked system within the district, but rather allow students to move back and forth between regular schools and magnet school programs.

Potential Methods of Resolution

- The district leadership establishes a general framework for the magnet school themes and curricula in its development of a districtwide strategy. This strategy should specify the degree to which the magnet designs will be targeted toward specific groups of students, how staffing of the magnets will be conducted, and what types of school organization will be used, e.g., total-school, part-school. Individual school themes and curricula then can be developed by district and school staff.
- The sources of innovation for magnet themes and designs should be generated from several possible sources: principals, teachers, community groups, parents, and district staff. However, the district staff responsible for curriculum coordination should be brought into the process of magnet planning to prevent the development of magnet programs that do not allow students to transfer easily between magnets and non-magnets.
- Involve broad participation of parents, community groups, and educational staffs in developing the program strategy for magnet schools. By showing the intent of the district to gain broad participation in planning, the magnet program will be seen as a method of general curriculum reform and improvement and magnet schools will not be seen as separate from the "regular" system.
- Develop and expand the concept of the district instructional system to include potential educational options for all students, not just the very bright students or the handicapped and problem students. Encourage the idea that models of quality education can have positive effects for the total district by showing that public schools can be improved.
- Evaluate magnet schools' effectiveness in meeting district and school objectives, and then use positive results and ideas to explore expansion of the magnet concept in other schools. Develop operational linkages between successful magnets and the staff and students of non-magnet schools.

CHALLENGE 5

SCHOOL LOCATION AND IDENTITY: Selecting schools and locations for magnet school programs that will allow for development of positive magnet identity and attract a racially-heterogeneous student body, but without creating parent and community resentment due to limited opportunities or selective recruiting and admissions.

A magnet school's attractiveness to students and parents is due to a complex variety of factors, that include: previous school identity, neighborhood, school improvements, current theme and identity, and recruitment methods. Although the district will want to generate sufficient interest in the magnet to attract students to fill the enrollment, the magnet school often obtains differential rates of interest from minority and white students and parents but yet must maintain a racially heterogeneous enrollment. The problem for a district comes with balancing the degree of interest with the available magnet enrollment opportunities.

Racial desegregation of magnets does not necessarily generate educational quality, but integration fosters and is a corollary of quality, and desegregation is a precondition to racial integration. A system can achieve the goal of quality integration in a number of ways. Magnets are not essential for this achievement, but they offer a powerful and flexible means to this end. They offer much when their power is utilized, not when they are incidental.

Potential Methods of Resolution

- Establish clear and well-publicized procedures and rules for magnet application and admission. Priorities for admission, e.g., neighborhood preference and racial balance goals, should be understood by each parent that applies for enrollment of a child.
- Balance magnet school locations in white and black, poor and middle class neighborhoods, to prevent any preference of schools that are turned into magnets or a predominant movement of students in any one direction.
- Avoid placing certain magnet themes in only white or minority neighborhoods. For example, all the "academic and college-prep" themes should not be in minority neighborhoods (presumably to attract whites), and all "career magnets" in white neighborhoods (to attract minorities). This policy can result in resentment due to perceived racial stereotyping or favoritism toward certain types of magnets.
- If magnets purposefully are located only in schools in either white or minority neighborhoods to assist with desegregation, transfer opportunities should not be limited for students of the same race. If necessary, the size of each magnet school or the number of schools should be expanded to meet the degree of interest rather than limit the access of one racial group.
- Overcome a negative perception of a school, regardless of neighborhood or location, by improving the identity and attractiveness factors associated with magnet schools, e.g., offer a strong incentive toward voluntary choice as opposed to mandatory assignment to another school.

CHALLENGE 6

Program accountability:

The cost analysis of magnet schools uncovered financial management policies and practices which adversely affected the capacities of individual school districts to measure the costs

of magnet schools and other programs. Cost accounting systems we encountered:

- Focused on direct costs while neglecting indirect costs
- Could not attribute direct or indirect costs to special programs like magnet schools
- Used outdated or inaccessible financial records
- Were not computerized in ways that promoted fast and accurate financial analysis.

These problems affected some districts more than others, and were more likely to be faced squarely by districts concerned about their financial solvency and efficiency than by others. Those districts interested in upgrading their financial planning and control should consider establishing or improving:

POTENTIAL METHODS OF RESOLUTION

Program Budgeting

- Traditionally, school systems have planned and budgeted based on contributions to schools in the form of dollars, teachers and administrators, supplies and materials, and physical facilities and equipment. Relatively little reference was made to the programs these schools support. Consequently, resource request in traditional budgets link costs to school buildings, but not to programs such as magnet schools which do not follow standard organizational lines. A program budget links the costs incurred by the school system's organizational units to programs and activities that usually cut across organizational boundaries: instruction, administration, community services, pupil services, extra-curricular activities, special programs (including magnet schools), etc.

- A program budget would use magnet school programs as a separate cost center and routinely allocate costs to magnet school programs as well as to the buildings in which those programs were housed. Through the use of special account codes and crosswalking, an analyst could determine the cost of all the magnet programs in a district, magnet programs at a specific school level, or different types of magnets (arts, science).
- A program budget would have immediate payoff to the school district by: displaying the costs of the school district's programs; assigning responsibilities for planning and managing programs, thus enhancing accountability; encouraging administrative personnel and school board members to think in terms of program results; enabling the district to establish priorities by program and allocate resources accordingly;; and providing a better tool for communicating to educators and the general public concerning the use of resources and the emphasis placed on programs.

Indirect Cost Accounting

- When asked to estimate their school or pupil costs, many districts tend to report only direct cost that consist mainly of staff salaries and instructional materials. Unfortunately, this practice understates the full costs of operating the schools and educating the pupils since it omits the indirect costs of district administration and overhead (e.g., district administrative salaries, capital outlay, and pupil transportation). It inaccurately assumes that the school could operate without the district and could change (e.g., adopt a magnet component) without the district incurring additional costs.
- Our view is that the full cost of any school or program should include both the direct cost easily and conveniently attributable to the school building or special program, and a fair proportion of district administration and overhead expense. By "fair proportion," we mean that percentage of total indirect costs incurred by the district because of the school or program. The percentage could be based on labor hours, labor dollars, or total costs. For example, if a program consumes 20% of the total labor hours or dollars in the district, it is allocated 20% of district administration and overhead expense as an indirect cost. In the magnet school cost study,

addition of an indirect cost amount to the direct costs reported by the districts often increased total costs by 20 to 30%.

Multi-Year Financial Planning

- Although school districts are legally required to budget for one fiscal year at a time, it is often necessary to forecast expenditures for several years in order to judge the long term impact and commitment of each program. A district often finds itself forced to operate costly programs due to commitments from prior years. To avoid such a predicament, multi-year program and financial planning is recommended, i.e., projection of a school district's estimated costs for three to five years into the future. Long term projections are particularly important for expanding programs or for programs making extensive use of capital expenditures.
- Projections can be based on expectations of new funding initiatives or on the termination of old ones (e.g., termination of ESAA operating grants). They can also be based on extrapolations of historical revenues and expenditures into the future (and then adjusted to fit changed circumstances). Regardless of how the projections are made, they can illuminate decision making about magnet schools by sharing the future cost implications of starting a new magnet as well as altering or eliminating an existing magnet.

In the third section of the Guide, we have provided summary descriptions of six magnet schools that were rated in our national study as offering high quality education and positive racial integration.

PROGRAM SUMMARIES OF QUALITY MAGNET SCHOOLS

We have summarized the design and characteristics of six of the magnet schools that were part of the study sample, which our analysis showed to be highly effective in offering quality integrated education. The school descriptions focus on the elements of program theme, design, curriculum, staffing, and student recruiting and selection. Then, for each school, we have outlined the key factors in its success as a magnet school in relation to district and school objectives.

The summaries describe magnet schools in four different theme categories:

1. Science, Mathematics and Computers
2. Arts and Communications
3. Social Studies, Humanities and Foreign Languages
4. College Preparatory and Academics.

These schools can be considered as models for development of other magnet schools based on their performance and useful role within these urban school districts. Additional program summaries are included in the Appendices to the Final Report.

BAINES HIGH -- MILLVILLE

Theme

Baines High is a health science professions magnet high school which emphasizes broad-based preparation for future health-related careers. The overall objective of the school is to maintain a high quality college preparatory program with a health science emphasis.

Development

Baines High opened as a magnet school in the fall of 1980 as part of Millville's magnet program, in three inner-city schools, designed to attract voluntarily white and black students to these historically-black schools. Baines was previously a black junior high school.

The choice of the health sciences as a programmatic theme was a result of many contributing factors. One reason was its predominance among suggested magnet themes from a random survey of parents prior to magnet development. Another reason was the model of a successful health science magnet in the Houston school district. The presence of the State Medical College in the city and the interest of the faculty and deans of the medical college in a health magnet was also an important factor. The medical community was interested in preparing students for the medical and applied health fields, which is the primary employer in this country. The community's interest in a college preparatory curriculum, which emphasized academics, also contributed to the theme.

Staffing

The staff of the Baines School, as well as the other magnet schools, was selected from a group of 111 respondents to an open advertisement for teachers from within as well as outside the

district. The applications were reviewed by the magnet director, district staff, and principal. Candidates were then interviewed by a 22 member committee made up of the district staff, magnet principals, and board members. Each applicant was given an independent rating by each committee member. These ratings were totaled and those with the highest scores were chosen.

Selection criteria included maintaining a 50/50 white/black ratio, commitment to the magnet concept, and the ability to communicate well to students and other staff members. Flexibility, experience, and background in the theme area were also important standards by which the candidates were judged. The nurses and health teachers on the Baines staff were not selected through this process, but instead were recruited by the principal. Of the entire staff, two came from the old school, 21 from other schools within the district, and one came from outside the district.

The principal of Baines is very well-suited to the school's theme and purpose. His strengths include public relations, staff coordination, and establishing and nourishing working ties between the Medical College, the district, and the community. He also helps with student recruitment. Overall, he is a strong administrator, but leaves the particulars of teaching to the teachers.

Students

Admission to Baines is based on some formal requirements. Applicants must have maintained a "C" average or better in each major subject area. Good conduct and attendance records are required. The applicant must also demonstrate through an interview that his/her interest is in the health field. Potential students are also asked to submit a one page statement on why they wish to attend Baines.

Baines's current enrollment is 267 students. All of the students volunteered and transferred from other schools. Student

recruitment is handled by the principal and guidance counselor through visits to other schools, mainly junior high schools. Letters and other materials are sent to each school principal and guidance counselor in order to make applications available to students. In some cases, health classes have visited other schools and made presentations.

Curriculum

The Baines health science curriculum, for all students in the school, is designed around a college preparatory program with an emphasis on mathematics, science, and health science studies. All students take a common core of courses from grades nine through eleven. The first year is the most structured. Everyone enrolled must take typing, a foreign language, and family living (Sex Education). Health career courses begin in the tenth grade and lab skills and patient care instruction is given in the eleventh. Advanced sciences and two hour practicum (internship) can be taken in the twelfth grade. The health career classes emphasize practical career exposure, field trips, and internships. Although all students participate in the health career curriculum, there is no vocational or job placement emphasis. Rather, the program prepares students for further health science education and making career decisions.

Features Unique to the District

The theme and curriculum at Baines make it unique within the District. Although many of the Baines courses are included in the District's overall curriculum, the health courses are unique to the school. Baines also offers more advanced health science courses than any other high school in the district.

Aside from curriculum, the educational environment at Baines sets it apart from other high schools in the district. There are

higher expectations for the students, as reflected in a greater volume of home work. There is closer contact between students and teachers. Baines also has health science facilities and equipment not found in the other schools in the district.

Baines is able to enforce high expectations for students through a "remand" policy. Students who do not meet the academic standards of success established by the school or who are disciplinary problems can be sent back to schools they previously attended. Although this policy has been used only twice, it allows Baines to hold student motivation as a means of maintaining its high academic standards.

Factors in Success

The theme, curriculum, and teaching methods at Baines are very well coordinated and are major ingredients in the school's success. But, perhaps the single most important factor in the school's success is its strong linkages with outside resources, especially the State Medical College. A faculty member of the Medical College provided assistance in designing Baines original curriculum and still maintains a curricular advisory vote. The Medical College offers a highly competitive summer internship and study program for selected high school students around the state. Four positions in that program are guaranteed for Baines students. Baines students also enjoy, as a regular part of their curriculum, the opportunity to gain practical experience working in hospitals and health centers under professional supervision.

The strong connection established between the Medical College and Baines is critical to the creation of Baines principle magnet feature, i.e., its reputation. The Baines School is known for providing a well designed science program which serves as a good background for further medical or science education. It also has a reputation for supplying the type of skilled training which makes

possible the immediate employment in a health-related field. Similarly, it is well known for offering practical "hands-on" experience in a medical setting and this enhances its other two assets. These features, which are the basis of Baines reputation and success, would be impossible or at least much more difficult without the aid of the Medical College partnership.

CARPENTER HIGH -- SUNSHINE CITY

Theme

The magnet program at Carpenter High is a part-school program called the Center for Science, Mathematics, and Computer Technology. Its main objective is to "provide excellent preparation for college and careers in science, mathematics, computers and health."

Development

The Carpenter magnet program was initiated in September of 1977 as part of the Sunshine City magnet school program that was established as a result of a March 1977 federal court order calling for the desegregation of 23 racially isolated schools. The former Carpenter Junior High did not meet the court's definition of a desegregated school (minority-majority ratio of twenty to eighty percent) and was selected by a citizens task force to be a magnet.

The Carpenter Center for Science, Mathematics, and Computer Technology is located in a ninety percent minority, working class neighborhood. The center began with 82 students in grades nine and ten, and has grown to include grades seven through twelve. Student population growth has been rapid from 124 in the school's second year to 625 in the 1982-83 school year.

Staffing

Staff members for the Carpenter magnet were selected through interviews with a committee composed of a specialist from the school board, the magnet coordinator, a personnel department representative, and a teacher representative. Ninety percent of the staff came from within the district and ten percent were already on the Carpenter faculty. The principal was selected by the superintendent of the schools and his staff. One hundred percent of the staff applied voluntarily to teach at Carpenter. The faculty is well suited to the

program as many are highly trained in their specialty and some have doctoral degrees. Pre-service and in-serving training is also extensive. Professionals from several local outstanding scientific institutions and universities provide expertise for projects, seminars, and field trips.

At Carpenter the principal and faculty share authority and responsibility for the program. The principal offers strong leadership and is interested in innovation. Faculty committees, however, have extensive responsibilities in the area of program development and school activities. The assistant principal and magnet coordinator are also quite actively involved in the administration of the school and the magnet program.

Students

The Carpenter magnet has no selective admission procedures based on grades, test scores, or grade point averages. But, students must have an interest in the theme and show academic achievement in science and math. Selection for the program from those applying is based on a priority system designed by the school board to facilitate the establishment of the racial balance of 60/40 minority/majority ratio. First priority is given to students who have been enrolled in a magnet program for at least a year and want to continue to the next grade. Second priority is given to resident minority/majority students. The third priority is assigned to new applicants from racially isolated schools. Priorities continue down to other categories as well, the main consideration being whether desegregation is enhanced in receiving and sending schools.

Total enrollment for the 1983-84 school year for the Gompers School was 915 with 625 students enrolled in the magnet program. The minority proportion of students is now sixty-two percent. There is a long list of those waiting to get into the program.

Curriculum

Designed by nine subcommittees consisting of 82 people, of whom 39 are from the local scientific community, the Gompers curriculum is very distinctive. It offers the students in grades 7-12 nineteen science and mathematics courses, Russian, German and Spanish, along with required courses in English, social studies, and Fine and Practical Arts. Subject offerings include not only science and mathematics but unique electives such as astronomy, space science, medical biology, and international relations for science. This rigorous curriculum is enhanced by up-to-date equipment, field trips, guest lectures, and small classes. High school students in the eleventh and twelfth grades are also required to participate in the city science competition.

Features Unique to the District

It is the curriculum that makes the Carpenter program distinctive. Among the 16 secondary magnet school program, it has the only science, mathematics, and computer technology theme. Its program is decidedly more rigorous than those of the regular high schools in these areas. The District only requires two years of mathematics for high school graduates, Carpenter requires four. Carpenter also requires three years of science as opposed to the District requirement of one. In the area of computer science, Carpenter requires two years, whereas there is no district computer science requirement. Carpenter graduates must earn 19 credits, whereas district graduates must earn only 13.

In addition to having a very unique curriculum, Carpenter also has a very unique teacher selection process. Teachers are recruited specifically for the magnet program and are interviewed by a panel of scientists, district administrators, and community representatives before selection by the principal.

Factors in Success

Chosen as one of 50 exemplars in the Search for Excellence in Science Education by the National Science Teachers Association, the Carpenter magnet program is one of the city's most successful and popular magnet schools. One of the keys to Carpenter's success is that the theme, curriculum, and teaching methods are well coordinated to form a coherent educational program. Considerable funding has provided the most up-to-date science equipment for the laboratories and classrooms. Aside from providing a well-coordinated program and excellent facilities, the computer program takes advantage of its location and exploits such diverse resources as an oceanography institute, an engineering corporation, a medical association, and several universities.

Another factor in the magnet's success and popularity is its location in a school with a nonmagnet population. It thereby offers an opportunity, to increase the level of achievement in science and mathematics, for the nonmagnet students by allowing them access to the magnet course offerings.

STAGE HIGH -- RIVERTOWN

Theme

The overall goal of the Stage magnet high school is to provide "a unified arts and academic approach to those young people with special talents in the creative and performing arts." This total-school arts magnet is one of the Rivertown district's most successful and effective magnet programs.

Development

The Stage magnet school opened its doors in September of 1973, making it one of the oldest of the current 21 magnet programs in 39 Rivertown schools. The district's magnet program was initiated in response to a 1972 NAACP lawsuit to create a voluntary desegregation plan as well as improve the quality of integrated education. The magnet school concept and the creative and performing arts theme of this school were brought to the district by the former superintendent of schools, who had experience with magnet programs in another urban district.

When the program began in the fall of 1973, it was located in an arts-dominated location of the city, but unfortunately in an inadequate facility. In 1977, the school was moved to its current location in a downtown neighborhood which is predominantly working class, racially-mixed in composition. The neighborhood is slowly changing, however, as many middle to high income whites begin to move back into the city. The location is excellent for the school because of easy access to public transportation as well as various art and cultural organizations. Designed originally to serve grades four through six, the school now serves grades four through twelve.

Staffing

The staff of the arts magnet was selected by the principal with some assistance from the artistic director. Ninety percent of the full time faculty (51 teachers) were recruited from inside the district. Nine full time arts specialists were recruited from outside the district. Also, on the staff are ten part-time teachers who provide private lessons to students. The arts staff is well suited to the program with many having ties to the arts community. Criteria for selection of the arts staff include willingness to "devote 200 percent of their time with no extra monetary benefit." The staff gives large amounts of time to extracurricular activities, performances, and rehearsals. The academic staff is part of the theme, not by a background in the arts, but by an interest in the arts and by donating extra time to help with ticket sales, program booklet design, etc. One hundred percent of the staff came to the magnet voluntarily.

Although the art and academic teaching staffs are well suited to the program, the leading force in the magnet is the principal. Described as "aggressive and driven," he is dedicated to his work and often spends long hours on the job. Trained in the arts, he gets involved in all aspects of the school including the curriculum. His strengths lie in encouraging innovation and offering a positive role model for his staff. He is active in soliciting contributions as well as obtaining assistance and support from the arts community.

Students

For acceptance into the program, each student must audition in his arts concentration area. Since racial balance is one of the primary goals of the alternative programs in the Rivertown Public Schools, the enrollment at all of the magnets is intended to reflect the citywide racial composition. The student enrollment in

the 1982-83 school year was 1,080 and was almost evenly divided between black and white students. Racial tension seems to be slight to non-existent, with competition between students based on talent and effort.

Curriculum

The curriculum of the arts magnet is designed to help students make the most of their talent. It was designed by the central office curriculum directors, school staff, community volunteers, and with the assistance of magnet staff members from another district. It conforms to the state academic requirements on the elementary and secondary levels in the area of English, mathematics, and reading. In addition, each student must take at least one survey course in each major art area as well as complete a full curriculum in their area of concentration. Performances and exhibitions in their specialty field are also required. Basic college preparatory courses, given in the regular high schools, are available as well.

Features Unique to the District

It is the curriculum that makes the school unique in the district. Previously, no arts-oriented program existed in Rivertown public schools. Arts courses are offered in the regular schools but are in no way as comprehensive as those provided by the magnet school. The program is distinctive as the only magnet with an arts theme.

The district requires seven periods of instruction daily, while the arts students receive nine such periods. The Stage school is distinguishable by its admissions requirements. Most of the other magnet schools do not have formal admissions requirements, and accept students on a first-come, first-serve basis.

Factors in Success

A major success factor is the authority that the principal enjoys. The principal selects and recruits his own staff. The school also requires that students maintain all grades above "C" and a high attendance level. Failure to meet these standards can result in a remand to the neighborhood school. This requirement has helped ensure a dedicated student population and is one reason for the school's success.

A second factor is the arts staff with its many ties to the cultural community. This brings that community into contact with the school through such events as lectures and guest speakers. The community links offer the student a chance to experience the arts as they are actually performed and expressed. The nine arts specialists lend professionalism to student instruction and performances.

The third and perhaps the most important key to success is that the theme, curriculum, and teaching methods are well-coordinated, forming a cohesive educational program. Students planning a performance of MacBeth for a drama class for example, may be required to read the play and analyze it for English class. The dynamic leadership of the principal is responsible for this excellent program coordination.

A fourth factor in the success of the program is the help it receives from the community. The primary source of support for the school is the "Friend of the Arts" group. This organization is nonprofit and is composed of representatives of the business community, various cultural organizations, universities, arts professionals, and parents. The friends meet regularly and provide cash and in-kind contributions to the SCPA. They supplement facility salaries, make renovations, and overall respond to the day-to-day needs of the school. They are extensively involved in the school's survival.

WILSON HIGH -- RIVERTOWN

Theme

The International Studies Academy magnet program at Wilson High School includes the International Baccalaureate program, the International Studies Program, and the English as a Second Language Program.

Development

The International Studies Academy was opened at the Wilson High School in the fall of 1979. Wilson was selected in 1977 as the site for the Academy because racial isolation was increasing in the school. Although Wilson is located in a predominantly white neighborhood, a recent urban redevelopment effort brought more minority families into the area. Many white parents chose to withdraw their students from Wilson for open enrollment programs as well as for private school education. District planners felt that by locating a unique academic program at the school white students would be attracted from across the district.

The International Studies Academy was first discussed in the early 1970's as a secondary school alternative. It was originally viewed as a natural extension of German, French, and Spanish bilingual programs in the elementary schools. The Academy would allow these students to take advanced level language classes as well as complete high school requirements in courses offering an international perspective. During the planning process, however, the teaching staff at Wilson researched the International Baccalaureate Program in New York, Washington, and Michigan. The Staff recommended that this prestigious program be offered at the Academy to provide a challenge for highly motivated students with above average ability. The International Baccalaureate Program (IBP) was the first of the three Academy programs to be implemented. This was followed

respectively by the English as a Second Language Program and the International Studies Program.

Staffing

The teachers at Wilson High were given the first opportunities to volunteer for positions at the International Studies Academy. The principal, along with district supervisors, interviewed these applicants and selected seven teachers from the Wilson faculty. The remaining 20 staff members were selected by a panel composed of the magnet program coordinator, magnet program teachers, district supervisors, and the principal or assistant principal. Extensive use is made of outside specialists, from the local ethnic communities, as guest lecturers, and to provide added dimensions to discussions, field trips, and research projects.

The principal at Wilson is enthusiastic and energetic, and has led innovation within the school. He is a strong administrator and takes an active role in curriculum development, and in leading efforts to publicize and promote the school.

Students

The fundamental criterion for admission to the International Study Academy is motivation, which is assessed through a review of an applicant's grades and by letters of recommendation. Students selected for the academy are those who have been highly recommended by their previous teachers as motivated to succeed academically.

The current enrollment at The International Studies Academy is 2,143 students. Fifty-eight percent of the students, nearly all white, transferred to Wilson from other schools. The remaining 42 percent for the program form within the school.

Curriculum

The International Baccalaureate Program (IBP) was founded in Geneva, Switzerland and designed to provide an integrated two-year course of study to prepare students for entry into colleges throughout the world. Students enrolled in the program must study a foreign language and a second language is required of students whose native tongue is French, Spanish, or German. The social studies, or "Study of Man," requirement allows concentration in the area of history, geography, economics, philosophy, or psychology. Students are required to take either biology or chemistry and mathematics. At least one elective must be taken from the subject areas of; art and design, music, a second foreign language, a second study of man or science, additional mathematics, or an additional course approved by the International Baccalaureate Office. Students must also complete a theory of knowledge course which extends over two years. In addition to required coursework, students in the program must complete a 5,000 word essay in one of the subject areas as well as actively participate in a creative, aesthetic, or social service project at least one afternoon each week.

The examination for the International Baccalaureate Diploma covers six subject areas and is the equivalent to the national examinations required in France, England, and Germany. Successful completion of the exam guarantees acceptance into colleges throughout the world. Graduates of the program who choose to study at American colleges or universities are generally given a year or more of advanced standing.

The International Studies Program (ISP) curriculum is similar to that of the International Baccalaureate program, but less demanding in terms of requirements. The ISP has required courses in five areas. Students are required to take one language for three to four years and do not have the community service advanced seminars, or essay assignment of IBP curriculum.

The English-as-a-Second-Language course (ESL) was added to the Academy to serve foreign academic students and other students with limited English proficiency. The number of foreign students in the ELS has increased, and although they are from various educational backgrounds, many are well prepared in their native language. The primary aim of the ESL program is to give these foreign born students an intensified study of both oral and written English in order to facilitate their adjustment to and success in an educational environment which operates in English. Many of the students enrolled in ESL are also enrolled in IBP and ISP. Those in the program include Russian Jews, and Southeastern European, French, German and Spanish born students.

Features Unique to the District

The International Studies Academy is unique to the district in theme and curriculum, as there is no other magnet program with an international perspective in the district. The curriculum is more advanced than the typical advanced placement-college preparatory programs in the non-magnet high schools.

Aside from curriculum, the International Studies Academy is singular in its teaching methods. College level methods are used, such as; independent study, advanced research projects, and seminars involving use of professors and other specialists for topical discussions. The students at the Academy are also distinguished from their peers in the district because they are required to take heavier course loads in several subject areas. They also enjoy an eight-period day as opposed to the standard seven-period day in the district.

Factors in Success

One of the key factors that has contributed to the success of the International Studies magnet at Wilson is the prestige of

the International Baccalaureate Program. It is the only program of its kind in the state and Wilson is one of only twenty-four public schools in the world to host this program.

Another factor in the success of the Academy is its effective use of community resources to enhance and supplement the curriculum. Outside specialists are used extensively in just about every area, including leaders from the various ethnic communities, members of the faculties of local universities, and representatives from business who are members of the magnet's "Partner in Education" group. These specialists serve as guest lecturers and volunteer teachers' aides, and lend an added dimension to student discussions, field trips, and research projects.

The program enjoys community support in other ways as well. Its "Partner in Education" group sponsors a reception at the Rivertown History Museum for prominent citizens each August to promote the program, and parental and administrative assistance is also important and consistently solid.

NATHAN HIGH -- EVERGREEN

Theme

The theme of the Nathan High School magnet program is mass media communications. This part-school magnet offers students an integrated program in the areas of radio, television, photography, journalism, and the graphic arts.

Development

The Mass Media magnet program at Nathan School was initiated in 1977, the same year the Evergreen district began its entire magnet program. The programmatic theme was the suggestion of the principal of the school to the district staff in charge of magnet program development. Nathan already offered courses in mass communication and journalism. The magnet concept was the idea of an electronics-trained teacher who expressed a desire to expand the existing program with radio/television, graphics, and photography concentration areas.

Facilities, equipment, and staff were expanded with federal magnet funds. A radio and T.V. studio was completely furnished with "state-of-the-art" equipment, the latest resources were ordered for the graphic arts and photography departments, and word processors were purchased for the journalism program.

The Nathan School is located in a middle-to-upper middle class neighborhood. The location of the Mass Media magnet at Nathan has the advantage of attracting and holding white and minority students, which was one of the objectives of the program. Initially, there was some racial tension within the school due to the influx of more black students. But through a series of conferences between teachers, parents, students, and community representatives, the problems were resolved and the racial climate at Nathan is now more favorable.

Staffing

The five core magnet staff members starting the mass media program were already teaching in the high school prior to the magnet program. The program director previously taught mass communications. Replacement teachers and support staff were referred by the district personnel office, but had been teaching in their respective areas before coming to the Nathan magnet program.

The mass media director, not the principal, is the most important administrator in the Nathan magnet program. He was responsible for the development of a school radio station, as part of the magnet, and the mass media program design. It is up to him to raise his own operational funds to support the magnet, particularly those for the radio/TV program, since federal funds have been reduced. He is young, dynamic, and has great confidence in his abilities to manage the station and the entire magnet program. He is aided by an advisory council that includes representatives of the International Brotherhood of Electrical Workers (IBEW), the Federal Communications Commission, and a local television station; all of whom provide consultive assistance when necessary.

Students

Admission to the Nathan Mass Media magnet program is through open enrollment. The only criteria for enrollment is improvement of desegregation in the sending and receiving school. The program currently has 150 students. Approximately 50 percent were already enrolled in Nathan High and 50 percent transferred in from all over the district.

Curriculum

The Mass Media curriculum offers the student a chance to study radio, television, graphic arts, photography, and journalism. The program courses are electives within the school curriculum, but a major is offered. In order to major in Mass Media Communications and receive the certificate a student must take four core courses in Graphic Arts, Radio/TV, Journalism, and Photography, plus six additional courses in these subject areas.

Each of the specialized study areas has its own objectives. The journalism program is aimed at acquainting students with techniques of preparing materials for the written media. Advanced students later learn to alter that style for radio and television use. The graphic arts program stresses teaching students how to prepare and reproduce a variety of printed materials with offset printing presses, and the use of other equipment and the dark room. The photography program is designed for those interested in photography as a career or as an avocation. It offers students the opportunity to experience different areas of the photographic media including, black and white photography, as well as experience with color analyzers and enlargers.

The most unique program is in radio/television. In addition to the four core courses the radio curriculum includes Electricity/Electronics, Broadcast Writing, and Accounting or Business Law. The T.V. curriculum includes all of the above courses plus two electives. Both programs provide the students with "hands-on" experience as they work in the radio broadcast station and closed circuit television station. Through these programs, students have the opportunity to apply electronics training in the operation and maintenance of the broadcast radio/television stations. They promote a basic understanding of broadcasting as a profession and a business, as well as, prepare students for entry into the broadcasting industry.

Features Unique to the District

The Nathan magnet is the only fully equipped and comprehensive mass media magnet in the district. Other high schools have programs in graphic arts, journalism, and photography, but no other school combines these areas into a comprehensive curriculum, or has the communications equipment that Nathan High has.

The radio/television program is unique to the school. In fact the radio station has the distinction of being the first, and for a long time the only, high school radio station in the country. It has expanded from an original ten watts to 3,500 watts and currently can be heard over a twenty mile radius. The radio station broadcasts twelve hours per day during the week, twenty-four hours on Friday and Saturday and until 10:00 p.m. on Sunday. The station occupies the top spot in radio listening for rhythm and blues audiences, which are primarily young and black. The T.V. station broadcasts "in-house" daily.

The Nathan program is unique within the district due to the many rules that had to be bent to accommodate the radio program. Since the station operates at times when school is not in session, it is necessary for students to have access to the building without adult supervision. The station has also had to adopt certain business strategies in order to operate in the black. Both of these circumstances required exceptions to certain rules and conventions of the district.

Factors in Success

The Nathan Mass Media magnet program has been successful largely because of the efforts of the school director and the popularity of the radio station. The magnet director manages the entire program and elicits support and funds to keep the program going. He also is responsible for the development and

operation of the radio station.

The radio station in particular, and the mass media program in general, receive considerable community support. A local commercial radio station and a shopping center, located in a black section of the city have provided assistance to the station and the program. Business contributions of over \$30,000 have helped to keep the program solvent, as federal funding has been discontinued. Additionally, in partnership with the school, a local community college operates the station over the weekend. This gives students more air time as well as an opportunity to interact with college students and teachers involved in the radio field.

DEWEY ELEMENTARY -- SISTER CITY

Theme

Dewey Elementary is a total-school elementary magnet with a theme that emphasizes basic skills for all students and offers student-selected applied skills. Its defined objective is to "integrate students' cognitive, affective, and psychomotor skills into a program geared to enhance artistic appreciation and expression, scholarship and creativity."

Development

The Dewey Elementary magnet is an inner-city school located in what was once a predominantly poor black neighborhood. The composition of the neighborhood is changing with newly renovated apartment and townhouses drawing young professional couples back into the city and with the recent influx of Southeast Asian families. The neighborhood is now more multi-cultural and multi-ethnic than in the past.

The Dewey Elementary School became a magnet in the Fall of 1976 as a result of a community decision concerning the method to achieve desegregation. The desegregation plan for the Dewey area was designed to attract white and black pupils from other schools in the area, as well as from the entire district. This was to be accomplished through the establishment of a large magnet school combining two older buildings and through a unique enriched curriculum. The idea for the magnet theme came from the Dewey principal and the Dewey community as a result of their active involvement in planning for desegregation.

Staff

A key to the Dewey magnet's strong program and high popularity is its outstanding teachers and staff. All have

volunteered, are highly committed teachers, and most have teaching skills in specialized areas. After Dewey became a magnet only 10 of its existing teachers were rehired. The rest of the original faculty was recruited by the principal from schools within the district. New staff members are mainly selected by the principal and the existing faculty. The 106 teachers, counselors and support staff offer a broad range of teaching skills necessary to the curriculum design. The staff includes teachers specializing in science, foreign languages, art, music, and industrial arts, as well as regular elementary teachers in the core areas and teachers with both types of skills.

Students

All school-age students in the Sister City school district are eligible to attend any magnet school but within certain restrictions:

- 1) Preference is given to students within the school boundaries set by the district,
- 2) Students transferring in must have a positive effect on the racial balance of the school,
- 3) Students are selected on a first-come, first-served basis from the transfer waiting list according to race.

The current enrollment of the Dewey school is 1,012 students. Of these 58 percent came from the Dewey attendance area and 42 percent came from other areas of the district. The current waiting list at Dewey contains over 450 names of students interested in the magnet program.

Curriculum

The educational program at Dewey is based on a "Dual Process" plan, which involves both a basic skills and applied skills program. The basic skills program occupies two-thirds of the

students' day and is comprised of reading, language, arts, spelling, writing, mathematics, social studies, and physical education. New students are screened in reading and math to establish their level of achievement and then grouped within a grade by their achievement levels and to ensure racial heterogeneity. The group assignments are adjusted based on the needs of the child as observed and assessed by teachers and team leaders.

The basic skills classes are taught by a team approach. Team teachers head up the math and reading/language arts departments. Each department is carefully coordinated, with the team teacher acting as a resource person for the classroom teachers. Individual instruction is also available.

The applied skills program occupies the remaining one-third of the day with students receiving instruction in different rooms and areas of the building. The curriculum consists of enriched electives in the areas of fine arts, humanities, science, health/physical education, creative arts, and extended applied skills. These courses usually involve "hands-on" activities in order to provide an opportunity for the practical application of the students' acquired proficiency. A student selects two applied skills classes every six weeks, and thus, can take 12 different topics per year. The teaching method used in these classes is team oriented as well.

Features Unique to the District

One of the key features of the Dewey school, which makes it unique, is its curriculum. No other elementary school offers the basic/applied skills program or makes available the highly enriched course offerings that the Dewey School offers. Other unique features include its large size, which adds to program diversity and its voluntary admissions procedure.

Another distinctive feature is the attention paid to multi-cultural programs throughout the year at the school. All students are included in these activities and functions. The curriculum also includes subject areas that direct academic effort at inter-group relations and multi-cultural studies.

Key Factors in Success

The key factor in the Dewey magnet's success is its varied, but structured program. The curriculum, theme, and teaching methods are well coordinated. The Dewey school enjoys the reputation of having a very good academic program.

Another key factor in Dewey's success is its effort to provide an educational program, for all students at all levels of ability, while simultaneously working to keep students grouped in heterogeneous classes. Dewey has integrated multi-cultural studies and programs into the day-to-day curriculum to the point that students accept these discussions and experiences as a regular part of their education.